AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22 (Canceled)

23.   (Currently Amended) In a tuning system for tuning to channels of a plurality of different broadcast types including digital broadcasts, a method of efficiently tuning to a channel of one of the broadcast types ~~without a user having to designate the broadcast type~~, the method comprising the following:

an act of the tuning system storing a plurality of service records in <u>a plurality of service spaces of</u> a memory accessible by the tuning system, wherein each service record contains tuning information for tuning to a channel of one of the plurality of broadcast types, ~~the tuning information for each service record including at least a broadcast type identifier and a channel identifier;~~

when one or more digital data streams are broadcast to the tuning system over one or more digital channels, an act of extracting additional tuning information from the one or more digital data streams, <u>wherein</u> the additional tuning information <u>is necessary for subsequent tuning to the one or more corresponding digital channels;</u> ~~including at least one of a program number, a program identifier, and a bit stream type;~~

an act of storing the additional tuning information in one or more of the service records that correspond to one or more digital channels over which the digital data streams were broadcast;

an act of the tuning system categorizing the plurality of service records into a plurality of service spaces <u>according to broadcast type, such that each service space corresponds to a different broadcast type;</u>

upon receiving a user selection of a service space, identifying a correct one of a plurality of tuners to use in tuning to one or more channels that are identified by one or more service records in the selected service space;

an act of the tuning system receiving a channel selection ~~from an input device communicatively coupled to the tuning system, wherein the selected channel corresponds~~ corresponding to ~~one~~ a particular one of the service records in ~~one of~~ the selected service spaces;

an act of the tuning system accessing the particular one of the ~~selected~~ service record<u>s</u> from the memory, the particular one of the service records including the extracted additional tuning information; and

an act of the tuning system tuning to the selected channel using the tuning information and the ~~any~~ extracted additional tuning information ~~of the accessed service record~~, wherein the extracted additional tuning information enables the tuning system to automatically tune into the ~~one or more digital data streams broadcast over the one or more digital channels~~selected channel without having to re-extract the additional tuning information that would otherwise be required to tune into the ~~one or more digital data streams~~selected channel.

24. (Original) The method according to Claim 23, wherein the act of the tuning system storing comprises the following:

an act of the tuning system storing information that identifies a tuner in each of the plurality of service records in the memory; and

an act of the tuning system storing information that identifies a channel in each of the plurality of service records in the memory.

25. (Original) The method according to Claim 23, wherein the act of the tuning system storing comprises the following:

an act of the tuning system accumulating the plurality of service records in the memory.

26.   (Original) The method according to Claim 25, wherein the act of the tuning system accumulating the plurality of service records comprises the following:

an act of at least one tuner of the tuning system monitoring at least one broadcast type to determine available channels in the at least one broadcast type.

27.   (Original) The method according to Claim 23, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

for each of the plurality of service records, an act of the tuning system storing a pointer associated with the service record in at least one of the service spaces.

28.   (Currently Amended) The method according to Claim 23, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces further comprises the following:

an act of the tuning system creating a favorites service space for including pointers to service records that correspond to ~~desirable channels~~service records included in at least one other service space corresponding to a particular broadcast type, and such that a viewer can select the channel from the favorites service space.

29-30. (Cancelled).

31.   (Original) The method according to Claim 23, wherein the selected service record corresponds to a Web page.

32.   (Previously Presented) The method according to Claim 23, wherein the additional tuning information further includes a Uniform Resource Identifier.

Claims 33-37. (Canceled)

38.   (Previously Presented) A method as recited in claim 23, wherein the additional tuning information includes information obtained from the program map table portion of the one or more digital data streams.

39.   (Previously Presented) A method as recited in claim 23, wherein the additional tuning information includes information obtained from the program association table portion of the one or more digital data streams.

40.   (Currently Amended) A computer program product for use in a tuning system for tuning to channels of a plurality of different broadcast types including digital broadcasts, the computer program product comprising computer-readable media having computer-executable instructions for implementing a method of efficiently tuning to a channel of one of the broadcast types without a user having to designate the broadcast type, the method comprising the following:

an act of the tuning system storing a plurality of service records in a plurality of service spaces of a memory accessible by the tuning system, wherein each service record contains tuning information for tuning to a channel of one of the plurality of broadcast types, the tuning information for each service record including at least a broadcast type identifier and a channel identifier;

when one or more digital data streams are broadcast to the tuning system over one or more digital channels, an act of extracting additional tuning information from the one or more digital data streams, wherein the additional tuning information is necessary for subsequent tuning to the one or more corresponding digital channels; including at least one of a program number, a program identifier, and a bit stream type;

an act of storing the additional tuning information in one or more of the service records that correspond to one or more digital channels over which the digital data streams were broadcast;

an act of the tuning system categorizing the plurality of service records into a plurality of service spaces according to broadcast type, such that each service space corresponds to a different broadcast type;

upon receiving a user selection of a service space, identifying a correct one of a plurality of tuners to use in tuning to one or more channels that are identified by one or more service records in the selected service space;

an act of the tuning system receiving a channel selection from an input device communicatively coupled to the tuning system, wherein the selected channel corresponds corresponding to one a particular one of the service records in one of the selected service spaces;

an act of the tuning system accessing the <u>particular one of the</u> ~~selected~~ service records from the memory<u>, the particular one of the service records including the extracted additional tuning information</u>; and

an act of the tuning system tuning to the selected channel using the tuning information and <u>the</u> ~~any~~ <u>extracted</u> additional tuning information ~~of the accessed service record~~, wherein the <u>extracted</u> additional tuning information enables the tuning system to automatically tune into the ~~one or more digital data streams broadcast over the one or more digital channels~~<u>selected channel</u> without having to re-extract the additional tuning information that would otherwise be required to tune into the ~~one or more digital data streams~~<u>selected channel</u>.

41. (Previously Presented) A computer program product as recited in Claim 40, wherein the act of the tuning system storing comprises the following:

an act of the tuning system storing information that identifies a tuner in each of the plurality of service records in the memory; and

an act of the tuning system storing information that identifies a channel in each of the plurality of service records in the memory.

42. (Previously Presented) A computer program product as recited in Claim 40, wherein the act of the tuning system storing comprises the following:

an act of the tuning system accumulating the plurality of service records in the memory.

43.   (Previously Presented) A computer program product as recited in Claim 42, wherein the act of the tuning system accumulating the plurality of service records comprises the following:

an act of at least one tuner of the tuning system monitoring at least one broadcast type to determine available channels in the at least one broadcast type.

44.   (Previously Presented) A computer program product as recited in Claim 40, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

for each of the plurality of service records, an act of the tuning system storing a pointer associated with the service record in at least one of the service spaces.

45.   (Currently Amended) A computer program product as recited in Claim 40, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces further comprises the following:

an act of the tuning system creating a favorites service space for including pointers to service records that correspond to desirable channelsservice records included in at least one other service space corresponding to a particular broadcast type, and such that a viewer can select the channel from the favorites service space.

46-47.   (Cancelled).

48.   (Previously Presented) A computer program product as recited in Claim 40, wherein the selected service record corresponds to a Web page.

49.   (Previously Presented) A computer program product as recited in Claim 40, wherein the additional tuning information further includes a Uniform Resource Identifier.

50.   (Previously Presented) A computer program product as recited in claim 40, wherein the additional tuning information includes information obtained from the program map table portion of the one or more digital data streams.

51.   (Previously Presented) A computer program product as recited in claim 40, wherein the additional tuning information includes information obtained from the program association table portion of the one or more digital data streams.

52.   (Cancelled).

53.   (New) A method as recited in claim 23, wherein the user selection of the service space is made from a graphical user interface.

54.   (New) A computer program product as recited in claim 40, wherein the user selection of the service space is made from a graphical user interface.

55.   (New) A method as recited in claim 23, wherein the channel selection is made from a graphical user interface.

56.   (New) A computer program product as recited in claim 40, wherein the channel selection is made from a graphical user interface.

57.   (New) A method as recited in claim 23, wherein the additional tuning information includes at least one of a program number, program identifier, and a bit stream type.

57.   (New) A computer program product as recited in claim 40, wherein the additional tuning information includes at least one of a program number, program identifier, and a bit stream type.